

Remarks

Applicants have received and carefully reviewed the Office Action mailed May 22, 2007. Claims 1-19 and 30-32 have been canceled. Reconsideration and allowance of the pending claims are respectfully requested.

Rejections under 35 U.S.C. § 103(a)

Claims 1, 2, 6-9, 11-13, 18, 19, 30, and 32 are rejected as being unpatentable over Boyd (US 5,683,391) in view of Davison (US 2001/0011170). Claim 10 is rejected as being unpatentable over Boyd in view of Davison et al. and further in view of Luque (US 4,790,297). Claims 3-5 are rejected as being unpatentable over Boyd in view of Davison and further in view of Foley (US 5,792,044). Claims 14 and 17 are rejected as being unpatentable over Aust (US 5,603,713) in view of Davison et al. Claims 15 and 16 are rejected as being unpatentable over Aust in view of Davison et al. and further in view of Boyd. Claim 31 is rejected as being unpatentable over Aust in view of Davison et al. and further in view of Michelson (US 6,123,705). While Applicants respectfully traverse these rejections, in the interest of furthering prosecution, claims 1-19, and 30-32 have been canceled, rendering the above rejections moot.

Claims 20-29 are rejected as being unpatentable over Mathews (US 6,033,406) in view of Foley. The Examiner asserts that Mathews teaches a method of treating the spine including placing a fusion device in at least one of a first interbody space between the first and second vertebrae and a second interbody space between the second and third vertebrae, and performing a two level fixation procedure. Applicants respectfully disagree. Applicants note that in the next rejection, the Examiner acknowledges that the combination of Mathews and Foley et al. fail to teach or suggest performing a method through an access device having a first and second configuration where the distal portion expands. In view of the Examiner's acknowledgement that Mathews and Foley et al. fail to teach or suggest each and every element of claims 20-29, this rejection appears to be in error.

Further, Mathews appears to teach a method for fixing two adjacent vertebrae. Mathews specifically teach, "FIG. 3 further shows fixation between adjacent vertebrae, identified as vertebra 10 and 10'", see column 7, lines 10-12 and FIG. 3. Additionally,

Mathews fails to teach or suggest the steps of inserting an access device and actuating said access device to a second configuration having an enlarged cross-sectional area at said distal portion thereof that spans at least a portion of a first vertebra, a second vertebra, and a third vertebra, as is recited in independent claim 20. Foley et al. do not appear to teach or suggest what Mathews lacks. Foley et al. teach:

According to one embodiment of the present invention, as depicted in FIG. 1, a device 10 is provided for use in percutaneous surgery which includes an elongated cannula 20 having a first inner diameter D_I and an outer diameter D_O sized for percutaneous introduction into a patient. The cannula 20 also includes a distal working end 21 and an opposite proximal end 22. The cannula defines a working channel 25 between the ends 21, 22 having a second diameter d_2 equal to the first inner diameter D_I sized for receiving a tool therethrough.

Emphasis added; see column 5, lines 36-46. Foley et al. thus appear to teach a cannula 20 having a constant inner diameter from a proximal end to a distal end. Neither Mathews nor Foley et al. appear to teach actuating an access device to an enlarged configuration such that a cross-sectional area at a distal portion spans at least a portion of a first, second, and third vertebrae, as is recited in claim 20. Additionally, there is no motivation for one of ordinary skill in the art to modify the methods of Mathews or Foley et al. to achieve the claimed method steps. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 20-29 are rejected as being unpatentable over Mathews in view of Foley and further in view of Davison et al.. As discussed above, Mathews and Foley et al. fail to teach or suggest the method steps recited in the claims. In particular, Mathews appears to teach a method for fixing two adjacent vertebrae. Davison et al. do not appear to teach or suggest what Mathews and Foley et al. lack. Davison et al. appear to teach a method for performing a procedure in which surgical instruments such as steerable instruments, shavers, dissectors, scissors, forceps, retractors, dilators, and video cameras, can be inserted through a cannula. See paragraph [0035]. Claim 20 recites, in part:

performing a two level fixation procedure spanning the first and second interbody spaces through the access device;
advancing a decompression tool through the access device; and
removing a portion of bone from one of the first vertebrae, the second vertebrae, and the third vertebrae through the access device

None of Mathews, Foley, or Davison et al. appear to teach or suggest such method steps. Similarly, none of the references appears to teach or suggest the specific method steps recited in independent claims 24, 28, or 29. Applicants submit that there is no motivation for one of ordinary skill in the art to use the cannula of Davison et al. for inserting the plates and screws of Mathews. Further, there is no reasonable expectation of success in performing such a procedure. Mathews appears to teach inserting the plates and screws through a conventional incision. Foley et al. appear to teach a method of using a fixed diameter cannula to provide optics and surgical instruments. Davison et al. appear to teach inserting instrument such as shavers, dissectors, scissors, forceps, retractors, dilators, and video cameras through their cannula. Davison et al. do not appear to teach or suggest performing the specific types of procedures recited in the claims through their device. Mathews does not appear to teach his procedure as being performed through any type of cannula, and Applicants submit that one of ordinary skill in the art would have no motivation, guidance, or reasonable expectation of success for inserting the multiple plates and screws of Mathews through the cannula of Davison et al. Thus, there is no teaching, suggestion, or motivation for one of ordinary skill in the art to combine the procedures of Mathews and Davison et al. Reconsideration and withdrawal of the rejection are respectfully requested.


Reconsideration and reexamination are respectfully requested. It is submitted that, in light of the above remarks, all pending claims are now in condition for allowance. If a telephone interview would be of assistance, please contact the undersigned attorney.

Respectfully submitted,

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By their attorney,

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